

Cryobiology Series

STATEBOURNE
cryolab 50

STATEBOURNE
cryostor 9

STATEBOURNE
biostor 5

STATEBOURNE
biotrek 1

STATEBOURNE
biotrek 1

STATEBOURNE
cryolab

STATEBOURNE
bio 34

STATEBOURNE
bio 2

Cryolab Series

Aluminium LN2 Storage Dewars

The Cryolab Series are manufactured to a proven design, giving strength and durability to a lightweight aluminium construction. Cryolab Dewars combine the qualities of *high thermal efficiency, easy handling and maximum safety.*

The Cryolab Series of liquid nitrogen dewars are designed specifically for the storage and decanting of liquid nitrogen.

A range of storage capacities from 2 litres to 50 litres is available to suit individual user requirements.

Duralab 25 - Heavy duty, stainless steel dewar. Ideally suited to the more rigorous handling requirements experienced in industrial applications.

Features

- 7 different models, Capacities 2L – 50L.
- Strong, lightweight aluminium construction.
- High thermal efficiency.
- Ultra Low Loss evaporation rates.
- Optimum holding times.
- Standard bucket or dual grip handles available.
- Accessories: liquid withdrawal devices, roller bases and tipping trolleys.
- **3 Year Warranty on Vacuum.**



Cryolab 25 Schematic

Technical Specifications

Model	Cryolab 2	Cryolab 5	Cryolab 10	Cryolab 20	Cryolab 25	Duralab 25	Cryolab 35	Cryolab 50
Capacity, litres	2	5	10	20	25	25	35	50
Evaporation Rate, L/day	0.08	0.18	0.2	0.18	0.25	0.6	0.27	0.28
Static holding time, days	25	28	50	111	100	41	130	179
Weight empty, kg	2.8	4.1	5.6	9.1	7.4	12.2	12.2	15.5
Weight full, kg	4.4	8.1	13.7	25.3	27.6	32.4	40.5	55.9
Neck diameter, mm	32	51	51	51	51	49.5	63	63
Overall height, mm	385	495	560	570	585	600	650	810
Overall diameter, mm	185	216	305	407	395	400	407	407
Part No.	9901015	9901030	9901040	9901050	9901062	9911001	991080	9901090

Warranty

Statebourne as manufacturers of high quality equipment are able to provide durable and dependable containers meeting the demands of modern laboratory and industrial use.

Our commitment to this quality means that we can offer a full 3 year warranty on vacuum.

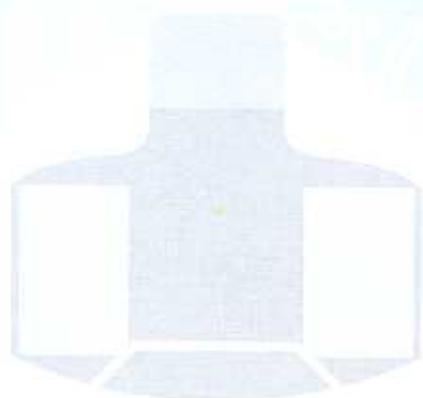
Biorack Series

The Biorack series of cryogenic refrigerators provides an attractive boxed storage system as a convenient alternative to traditional canister storage systems.

The square racks hold either 25 cell or 100 cell plastic boxes. This boxed inventory control system provides easy access and quick identification of samples.

The narrow neck design provides exceptionally low evaporation rates thereby offering large storage capacity but with low running costs.

Biorack refrigerators are available in 750, 2400 and 5400 vial capacities.



Biorack 2400 Schematic



Racked cryoboxes can be easily and quickly accessed

Racked Storage Systems

Features

- User friendly racked inventory control system.
- Supplied complete with Racks and Plastic Cryoboxes as standard.
- Suitable for 1.2, 1.8 and 2.0ml cryovials.
- Quick, easy location of cryovials in 25 and 100 cell cryoboxes.
- High Capacity with exceptionally low evaporation rates.
- Lockable lids on all models.
- Accessories include: low level alarms, roller bases.
- CE marked in accordance with EC Medical Devices Directive.
- **3 Year Warranty on Vacuum.**



Technical Specifications

Model	Biorack 750	Biorack 2400	Biorack 5400
LN2 Capacity, L	35	50	137
Evaporation Rate, L/day	0.3	0.63	0.63
Holding time, days	117	79	217
Working time, days**	73	50	136
Weight empty, kg	19	29	45
Weight full, kg	47	69	155
Neck diameter, mm	120	216	216
Overall height, mm	710	685	958
Overall diameter, mm	480	646	646
No of racks	5	6	6
No of boxes per racks	6	4	9
Total No of Boxes	30	24	54
No of vials per box	25	100	100
Vial capacity, 2ml	750*	2400	5400
Part No.	9902132-3	9902146-3	9902145-3

*extra centre canister in centre gives vial capacity of 900.

**Working time = Holding time divided by 1.6. Actual working time will vary depending on individual applications.

NB: All capacities are based on the 2ml cryovial.

Bio Series

Cryogenic Refrigerators

The Statebourne Bio Series offers **Two Ranges** of high performance cryogenic refrigerators. A choice of **High Capacity Refrigerators** and **Long Holding Time Refrigerators** are available to accommodate a wide range of cryo-biological cell storage applications.

Designed in our purpose built factory using the very latest computer aided techniques the Bio Series is manufactured to ISO 9001 using super insulating vacuum technology processes. All Statebourne Bio Series refrigerators are individually tested with liquid nitrogen to guarantee the highest levels of performance and security.

The Bio Series is ideally suited for the storage of biological material in cell culture, semen and embryo storage for IVF, fertility and artificial insemination applications. Traditional canister storage systems are designed to hold vials in cryocanes or straws in goblets.

Features

- Designed for the storage of cells, semen and embryos in either straws or vials.
- 11 models provide a wide variety of storage capacities and holding times.
- 1.2, 2.0 or 5.0ml vials held in canes in canisters.
- Straws held in goblets in canisters.
- Lockable lids on all models.
- Numbered index location rings.
- Accessories include low level alarms, roller bases, canes etc.
- All units come complete with canisters and neck plug.
- CE marked in accordance with EC Medical Devices Directive.
- **3 Year Warranty on Vacuum.**



High Capacity Refrigerators allow the storage of large quantities of semen, embryos, and biological material in either straws or vials. Excellent holding times and exceptionally low evaporation rates provide a cost effective storage system with low running costs.

Technical Specification - High Capacity Refrigerators

Model	Bio 12	Bio 21	Bio 22	Bio 34	Bio 36
LN2 Capacity, L	12	21	21	34	36
Evaporation Rate, L/day	0.19	0.19	0.28	0.18	0.30
Holding time, days	63	110	75	189	120
Working time, days**	39	69	47	118	75
Weight empty, kg	10.8	15.6	15.7	17.8	19.1
Weight full, kg	20.4	32.6	32.7	45.3	47.4
Neck diameter, mm	70	89	120	89	120
Overall height, mm	470	579	537	710	710
Overall diameter, mm	408	480	480	480	480
No of canisters	9	6	10	6	10
Canister Diam x H, mm	46x120	68x120	73x120	69x275	73x275
Vial capacity, 2ml				684	1020
Straw capacity, 0.25ml	4680	4920	8200	9840	16400
Part No	9902070	9902095	9902096	9902110	9902130

**Working time = Holding time divided by 1.6.

Actual working time will vary depending on individual applications.

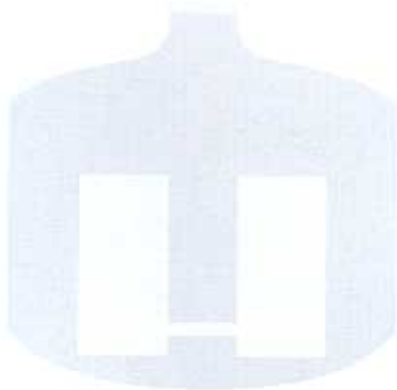


Long Holding Time Refrigerators provide holding times from 25 days up to 350 days for the purposes of long term storage with minimal use of liquid nitrogen. Canister storage systems provide storage capacities of up to 2400 straws (0.25cc) or 180 vials.

Technical Specifications - Long Holding Time Refrigerators

Model	Bio 2	Bio 3	Bio 8	Bio 10	Bio 20	Bio 35
LN2 Capacity, L	2	3	8	10	20	35
Evaporation Rate, L/day	0.08	0.11	0.10	0.10	0.10	0.10
Holding time, days	25	27	80	100	200	350
Working time, days**	16	17	50	63	125	219
Weight empty, kg	3.0	4.3	8.6	7.9	11.1	18.6
Weight full, kg	4.6	6.7	15.1	16.0	27.3	46.9
Neck diameter, mm	32	51	51	51	51	51
Overall height, mm	390	464	475	640	640	730
Overall diameter, mm	185	216	407	305	407	480
No of canisters	3	6	6	6	6	6
Canister dimensions, mm	25x120	38x120	38x120	38x275	38x275	38x275
Optional	mm			38x120		38x120
Vial capacity, 2ml				180	180	180
Straw capacity, 0.25ml	360	1200	1200	2400	2400	2400
Part No	9902015	9902030	9902050	9902060	9902080	9902120

**Working time = Holding time divided by 1.6. Actual working time will vary depending on individual applications.



Bio 21 Schematic



• All Bio Series refrigerators are supplied with traditional canister storage systems

Biotrek Series

Vapour Phase Portable Dry Shippers



Biotrek dry shippers are manufactured from stainless steel and aluminium with additional reinforcement to provide a rugged transport vessel for the safe transport of biological material.

The Biotrek range of dry shippers contain a special cryo absorbent material in the inner wall which absorbs liquid nitrogen to hold samples in a vapour phase environment at cryogenic temperatures.

Special internal LN2 absorbent allows quick, efficient absorption of liquid in minutes rather than hours saving valuable operator time.

The Biotrek 3 has been specially designed for transport of a wide range of biological material, semen, and embryos. A zip top transport bag is available for easy transportation in hand luggage.

The Biotrek 10 is designed to accommodate the storage and transport of larger quantities of biological material such as blood bags, heart valves and other human or animal organs. Also permits the transport of much larger quantities of straws and vials than a conventional dry shipper with safety and confidence.

Features

- Vapour phase cryogenic storage environment.
- Fast LN2 absorbent time – fill in minutes!
- Rugged, stainless steel shipping containers.
- Internal cryo-absorbent holds material safely in vapour phase.
- Blood bag and heart valve storage.
- Straw and cryovial storage options.
- No LN2 spillage.
- Optional canister systems for Biotrek 10.
- Lockable lids on all models.
- CE marked in accordance with EC Medical Devices Directive.
- Complies with IATA shipping regulation 202.
- 3 Year Warranty on Vacuum.

Technical Specifications

Model	Biotrek 3	Biotrek 10
LN2 Capacity, L	3	10
Evaporation Rate, L/day	0.15	1.25
Holding time, days	20	8
Working time, days**	13	5
Weight empty, kg	5.0	21.0
Weight full, kg	8.9	31.9
Neck diameter, mm	51	184
No of Canisters	1	4
Internal dimensions, mm	38 x 275	184 x 275
Vial capacity, 2ml	30	408
Straw Capacity, 0.25cc	400	6560
No of Blood bags		8/9
Part No	9903030	9915500

**Working time = Holding time divided by 1.6. Actual working time will vary depending on individual applications.



Biotrek Schematic



Transport bag for Biotrek 3

Open Dewars Series

The Open Dewar series offers a range of open neck stainless steel dewars, sizes ranging from 0.5 litres to 80 litres capacity. Virtually unbreakable these dewars are resistant to vibration, impact or shock and are ideally suited to a wide range of general laboratory and industrial applications.



Stainless Steel Open Dewars

Features

- Uses – short term storage and immersion of materials, cold traps on vacuum systems, cryosurgery and manipulation of straws, vials and biological specimens.
- The larger 5 to 80 litre heavy duty models are ruggedly designed to meet heavy duty handling requirements.
- All units supplied complete with handles and lids.
- OD 50 and 70 have heavy duty side carrying handles.
- Roller bases available for 15 – 80 litre models.
- **2 Year Warranty.**

Technical Specifications

Model	Capacity Litres	Diameter Int. mm	Diameter Ext. mm	Height Int. mm	Height Ext. mm	Weight Empty, kg	Weight Full, kg
Lab Series							
OD 0.5	0.6	65	87	180	204	0.5	1.0
OD 1	0.9	85	107	206	232	0.9	1.6
OD 2	1.8	100	122	285	312	1.3	2.8
OD 3	2.6	185	200	160	190	1.8	3.9
OD 6	5.5	185	200	270	300	2.4	6.8

Heavy Duty Series

OD 5	5.25	150	217	297	432	4.7	9.0
OD 10	10	150	217	590	725	7.1	15.5
OD 15	18	260	333	370	565	13.0	27.5
OD 25	31	327	385	400	595	15	40
OD 50	50	381	462	471	656	25	65
OD 80	66	406	460	513	777	28	81

The Cryotemp Wireless Alarm System has been designed to provide 24 hour protection for all biological refrigerators. Small and compact a single transmitter is attached directly to each refrigerator. Communications Centre consists of a Receiver and Auto-dialler which will give audible, visual and telephone communications when an alarm from a Temperature Transmitter is activated.

Features

- Alarm temperature range, -200°C - +100°C.
- Time delay range, 0 - 25 minutes.
- Multiple transmitters can be connected to the system.
- New equipment can be connected to the system in minutes at minimal cost.
- Audible and visual indication when alarm is activated.
- Alarm can be cancelled by remote telephone.

Cryotemp Wireless LN2 Temperature Alarm



Biorack 750

Cryotemp alarm receiver

Cryotemp alarm transmitter

Cryobiology

Accessories



Roller Base-Tipping Trolleys

Roller Bases, and pouring trolley is available for use with the Cryolab 25 & Duralab 25 dewars. A series of roller bases are available to suit dewars and refrigerators from 20 to 50 litres capacity.



Low Level Alarms/Autofill

Protection for cryo-preserved biological material. Mains or battery operated alarm provides audible and visual alarm when LN2 level falls below minimum set level. Remote contact available on mains alarm.



Cryoboxes

Polycarbonate cryoboxes for storage of biological material. 25, 81 and 100 cell options. Internal dividers and moulded numerical numbering on lid.



Phase Separators and Transfer hoses

Used in conjunction with Statebourne's Cryostor low pressure cylinders, transfer hoses together with phase separators, allow for safe and easy decanting of liquid nitrogen without splashing and reduced fogging.



Liquid Nitrogen Withdrawal Device

Statebourne low pressure withdrawal device makes dispensing from the larger Cryolab Series of dewars convenient and safe. The withdrawal devices are available in two sizes for use with 51mm & 63mm neck diameters.



Oxygen Depletion Monitor

Mains operated, wall mounted G310 Oxygen depletion monitor for continuous monitoring in the 0-25% range. Includes 2 adjustable low level alarms, digital display and 4-20mA output.



Cryocanes and Sleeves

Aluminium cryocanes holding 5 or 6 vials. PVC and cardboard sleeves provide extra security during handling and storage. PVC does not become brittle while frozen. Cryocane colour.



Protective Clothing Safety Gloves, Aprons, Face Shields

A wide range of laboratory gloves and aprons are available in standard or waterproof versions. These provide operator protection against freeze burns and frostbite. Available in small, medium and large sizes.



Cert. No. FM 56465

In the interests of our policy of continuous improvement, Statebourne reserve the right to amend the specifications of our products.